DOCUMENT RESUME

ED 269 026 IR 051 503

AUTHOR Nordstrom, Lance O.
TITLE Scientific Communication at an International Scale: A Review and Bibliography of the UNISIST Project.
PUB DATE 7 Mar 86
NOTE 50p.; This paper was written for a directed study in the Faculty of Library Science at the University of Alberta (Canada).
PUB TYPE Reference Materials - Bibliographies (131) -- Reports - Descriptive (141)

EDRS PRICE MF01/PC02 Plus Postage.
DESCRIPTORS Bibliographies; Developing Nations; Foreign Countries; *Information Networks; *Information Services; *International Cooperation; *International Programs; Position Papers; *Scientific and Technical Information
IDENTIFIERS *UNISIST

ABSTRACT

Within the last few decades there have been significant initiatives to establish and develop international programs and systems to facilitate access to the information resources of cooperating countries. A program of the United Nations Educational, Scientific and Cultural Organization (Unesco), UNISIST was designed to encourage and coordinate the development of a flexible and loosely connected network of information services based on the voluntary cooperation of participating nations. This paper briefly traces the historical evolution of UNISIST, particularly in relation to the changing focus of its objectives, and includes a reasonably comprehensive bibliography of UNISIST and its activities. The 304 bibliographic references were collected by searching several pertinent indexing and abstracting journals, a bibliography of Unesco publications, and the ERIC database. The citations are predominantly for articles written in the English language, although some foreign works are included. Each citation includes the principal personal author or corporate author, date of publication, title, and journal/report data. A keyword subject index and a list of abbreviations used in the bibliography are included. (THC)

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SCIENTIFIC COMMUNICATION AT AN INTERNATIONAL SCALE: A Review and Bibliography of the UNISIST Project

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Scientific Communication at an International Scale: A Review and Bibliography of the UNISIST Project

INTRODUCTION

Scientific and technical information can be regarded as a cumulative, international resource; all countries contribute to and borrow from the knowledge base of science and technology. An important corollary to this statement is the proposition that no single country can achieve self-sufficiency in scientific and technological information. These two observations provide a logical, rational argument for international cooperation in the exchange of scientific and technical information among nations.

Within the last few decades there have been significant initiatives to establish and develop international programmes and systems to facilitate access to the information resources of cooperating countries.[297] Perhaps the most ambitious and far-ranging of these is the UNISIST programme of the United Nations Educational, Scientific and Cultural Organization (UNESCO).

UNISIST was designed to encourage and coordinate the development of a flexible and loosely connected network of information services based on the voluntary cooperation of participating nations. The initial focus of UNISIST was on information in the basic and applied sciences, engineering, and technology, with plans to eventually incorporate other fields of knowledge. The five main objectives stated for the original UNISIST programme were to:

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(1) improve the tools of systems interconnection (e.g., standardization);

(2) strengthen the role of institutional components of the information transfer chain (e.g., libraries);

(3) develop specialized manpower (e.g., training of information specialists);

(4) develop scientific information policies and structures, and aid in the establishment of national networks; and

(5) assist developing countries in the development of scientific and technical information infrastructures.[233]

Although the initial objectives and purpose of UNISIST were clearly stated at its inception in 1972, there has always been confusion about what the acronym actually stood for. The first official definition of UNISIST was the "World Science Information System." This was later changed to the "Intergovernmental Programme for Cooperation in the field of Scientific and Technical (Technological) Information", and presently the term UNISIST is used as a proper name in its own right related to UNESCO's General Information Programme.[87] To further confound the issue, UNISIST has also been defined as the "United Nations Information System in Science and Technology" (Random House Dictionary of New Information Technology, 1982) and the "Universal System for Information in Science and Technology" (Abbreviations Dictionary, 6th ed., 1981).

An illuminating explanation of UNISIST was given by Dr. Herbert Coblans in 1972, in his capacity as a member of the UNESCO-ICSU Central Committee on the Feasibility of a World Science Information System:

> The term UNISIST attempts to symbolize the part which the United Nations (UN) should take in promoting a world wide system (SIST) of information both scientific and technical (IST). Now, this is not a true acronym, but let me say this: until we got the acronym UNISIST, nobody would even listen to us - nobody knew us. Once that acronym was invented, people started talking about UNISIST.

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> The periodicals started writing about it. So, however wrong it may be, however misleading it may be, let us forget how it was created and what it means. It has now become a concept in the way Unesco is a concept.[8]

Accepting Coblan's definition of UNISIST, this paper concentrates on two related objectives: (1) to briefly trace the historical evolution of UNISIST, particularly in relation to the changing focus of its objectives, and (2) to compile a reasonably comprehensive bibliography on UNISIST and its activities. Throughout the paper, authoritative sources will be footnoted with the appropriate number from the bibliography.

METHODS

The data for this study (i.e., bibliographic references to UNSIST) were collected by searching several pertinent indexing and abstracting journals, a bibliography of UNESCO publications, and the ERIC database. Although UNISIST was formally created in 1972, it was preceded by a 5 year study of the feasibility of a world science information system, initiated in January 1967.[2,3,4] Therefore, the secondary sources were searched, where possible, from 1967 to 1985. These sources, and the subject headings examined in each, are listed below.

1. Library and Information Science Abstracts (London: Library Association, 1969-).

The broad scope of LISA covers all aspects of librarianship and library operations, as well as information science, services, and systems. Articles over one page in length are indexed from approximately 550

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journals. Brief communications, news items, and letters to the editor are excluded. Monographic materials account for about 18% of the database. Abstracts accompany the bibliographic citations. The LISA subject headings searched were:

International cooperation
- Agriculture
- Environment
- Science and technology

International information communication
- Science and technology

International information services
United Nations
UNISIST Project

2. Information Science Abstracts (Philadelphia: Documentation Abstracts, 1966-).

This abstracting journal provides selective coverage of books, periodicals, conference proceedings, reports, and patents dealing with the various aspects of information science, including international information programmes and systems. Relevant descriptors searched were:

Cooperation
Information Science - Documentation
- International Planning

Information Systems and Applications
- General
- Networks, Regional Systems, Consortia
- Sciences, Engineering

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3. Library Literature (New York: H.W. Wilson, 1933-).

Library Literature is an author/subject index to materials on library and information science, including journals, books, pamphlets, films, filmstrips, microcards, microfilms, and library school theses. Abstracts are not included, but some citations are briefly annotated. Subject headings searched were:

Communication of scientific and technical information
Cooperation, International
Information storage and retrieval systems - Special subjects
- Science and technology
International serials data system
International standard bibliographic description
UNISIST

Apart from the three secondary sources listed above, which are all specifically concerned with information science, two indexes dealing exclusively with scientific and technical literature were scanned.

4. Applied Science and Technology Index (New York: H.W. Wilson, 1958-).

The terms UNISIST or World Science Information System were not used as descriptors in the Applied Science and Technology Index. Therefore, the subject terms searched were:

Information storage and retrieval systems
Information systems, Management
Intellectual cooperation
International cooperation
Scientific information
UNESCO

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5. Biological and Agricultural Index (New York: H.W. Wilson, 1916-).

As with the preceding index, UNISIST did not appear to be a subject heading in the Biological and Agricultural Index. Descriptors searched were:

Communication in science
Information storage and retrieval systems
International cooperation
United Nations

6. Educational Resources Information Center (ERIC)

The ERIC database was searched online from 1967 to present. The ERIC descriptors listed in the thesaurus were not particularly useful in retrieving relevant citations. The two most appropriate terms, though both quite broad, were:

International cooperation
International programs

Therefore, a free-text search was performed on the title and abstract fields using UNISIST as the key search term.

7. List of documents and publications of the General Information Programme and UNISIST: 1977-1983 (Paris: Unesco, 1985).

This recent bibliography covers UNESCO documents and publications on UNISIST issued since the creation of the General Information Programme, as well as a number of guidelines which had been published previously. Items were selected for the present bibliography if UNISIST appeared as a keyword or identifier in the descriptor field of each bibliographic record.

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These seven secondary sources supplied all of the references reported in this study. Most of the journal articles listed in the present bibliography were located in LISA, ISA, and Library Literature, while the majority of the technical reports and conference proceedings were obtained from the UNESCO publication. Very little information was provided by the Applied Science and Technology Index or the Biological and Agricultural Index. The ERIC search duplicated much of the material found in the three library and information science indexing/abstracting services.

The citations are predominantly to articles written in the English language. However, some foreign works are also included. In these cases, an English translation of the title is given in square brackets.

As references were identified, they were stored in a random-access file on an Apple II+ microcomputer. The programs used to create, sort, and index the bibliographic records were written in Microsoft BASIC (MBASIC). Due to string limitations (255 characters) and the need to confine each citation to a single character string for formatting purposes, there is extensive use of abbreviations in the bibliography. These abbreviations are defined in Appendix I.

Each citation includes the following information, in the order given: principle personal author or corporate author, date of publication, title, and journal/report data. Where there is more than one author only the first author is given, followed by et al. to indicate multiple authorship. Where the author is not identified, authorship is indicated as Anon. Journal data comprise the abbreviated journal title, volume and issue

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number, and pagination. Technical report data generally include the publication number, place of publication, sponsoring body, and pagination. A subject index based on significant title keywords follows the bibliography.

The bibliography was formatted using a program written in MBASIC, and printed with an Epson dot matrix printer. The introduction, methods, and historical section were formatted using FMT on the University of Alberta Amdahl mainframe computer and printed with a Xerox 9700 page printer. The subject index and list of abbreviations were formatted with Micropro Wordstar and printed on the dot matrix printer.

HISTORICAL EVOLUTION OF UNISIST

UNISIST began as a joint venture involving UNESCO and the International Council of Scientific Unions (ICSU).[2,8] Each organization had been independently considering ways in which the transfer of scientific information could be more efficiently effected on an international scale, and in January, 1967, an ICSU/UNESCO working party was convened to discuss together the feasibility of a world science information system.[2,11] It was decided that a formal study of the problem should be undertaken, with the following guidelines:

(1) the proposed World Science Information System (UNISIST) should be a flexible network based on the voluntary cooperation of existing and future information systems;

(2) UNISIST should be restricted initially to natural science, but should be extended as soon as possible to technological information, and provision should be made to apply the experience gained to other fields of learning in due course;

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(3) the study should include questions of standardization;

(4) the study should pay special attention to the needs of scientists in developing countries; and

(5) consideration must be given to overcoming problems of language barriers in communication of information.

A Central Committee was established, comprised of representatives from both UNESCO and ICSU. The Committee appointed four Working Groups to study (1) standardization of bibliographic descriptions, (2) research needs in documentation, (3) language problems, and (4) scientific information in developing countries. As well, an Advisory Panel was formed, composed of representatives from large operating systems such as BIOSIS, INIS, and MEDLARS, to examine and report on the progress of the working groups.

Jean-Claude Gardin was responsible for preparing a report on the findings and recommendations of the UNISIST feasibility study.[231] The first draft was presented to the Central Committee at its 4th session in Paris, December 15-17, 1969. The report concluded that such a world science information system was feasible, and that conceptually it should be based on existing components.

Although encouraged by the preliminary report, the Central Committee wished to incorporate as many and as representative views as possible to secure the maximum support they could, not only from those concerned with information transfer but also from every kind of user. A second draft of the report, taking into account the broader scope requested by the Central Committee, was completed in May, 1970, and published in 1971.[234] A synopsis of the report was written by Scott Adams and published in the latter part of 1970.[232]

In both the report and synopsis, five programme objectives were explicitly stated for UNISIST:

(1) the improvement of tools of systems interconnection (e.g., standardization of elements of bibliographic description for machine retrieval systems, scientific subject classification, creation of an international serials data system);

(2) the strengthening of the functions of institutional components - libraries, documentation centres, translation centres, indexing and abstracting services - with an emphasis on reduction, compression, and evaluation of scientific information;

(3) the development of specialized human resources (i.e., librarians and information technicians) and the training of scientist users;

(4) the improvement of the economic and political environment for information services by urging governments to: (a) create national foci for the development of information policies, (b) provide support for domestic and international information activities, and (c) reduce unnecessary legal barriers to the international flow of information;

(5) to aid the developing countries of the world by urging these countries to concentrate on the development of infrastructures (e.g., libraries) and regional information networks with neighbouring nations.

The UNISIST Intergovernmental Conference of 1971 approved the conclusions and proposals of the feasibility study and recommended formal institution of UNISIST as an official UNESCO programme. The Conference was attended by delegates representing 83 states and 39 intergovernmental and non-governmental organizations. The Canadian delegation was headed by Guy Sylvestre, the National Librarian, and had the distinction of being the only delegation to abstain from voting on the resolution to implement the UNISIST programme. Although supporting UNISIST in principle, the Canadian representatives wished to have specific recommendations in the study clarified, a more clearly defined program, an implementation schedule drawn up according to priorities agreed upon by participants, and a realistic

budget established before they would endorse UNISIST unequivocally.[2'6] As an aside, it is interesting to note that, since the Canadian Institute for Scientific and Technical Information was not established until 1974, Guy Sylvestre led the Canadian delegation rather than Jack Brown, CISTI's first director. However, Dr. Brown later became involved with UNISIST by offering Canada's expertise in SDI services to interested UNESCO member states.[6]

Although UNISIST was originally described as a World Science Information System, the creators of UNISIST have consistently pointed out that it is not restricted to science, nor is it a system in the conventional sense. For example, Scott Adams indicated in 1972 that there was strong pressure at the UNISIST Intergovernmental Conference, and even before, to broaden the conceptual base to include technology, the social sciences, and the humanities as well as the natural sciences.[8] Indeed, the original guidelines to the Feasibility Study emphasized the intention of extending the programme to other fields of knowledge. Also in 1972, John Gray stated that UNISIST was a programme of action towards a world system, and not a philosophy or system in itself. He insisted that the term World System should be viewed in terms of a network of voluntary cooperation rather than a highly centralized activity.[8]

During UNISIST's early years, there also was confusion concerning the relationship of UNISIST with presently existing international associations such as ISO, FID, and IFLA. This topic has been adequately reviewed by Scott Adams and J. Werdel,[3] but Herbert Coblans provides the following concise analysis:

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> At present ISO promotes standards - nobody listens; Unesco organizes documentation centres for developing countries - after 5 or 6 years some of them collapse, because the governments do not support them. WHO and FAO have some responsibility for subject documentation, OECD tries to coordinate science information policy, ICSU coordinates a limited number of abstracting services for the pure sciences. FID and IFLA look at the professional aspects of documentation and librarianship. But there is no overall body that has the mandate and the resources to bring these multifarious and complex activities together into some sort of focus, so that they can act on limited agreement. In my view the information chaos from which we suffer today is not due to the so-called literature explosion, but rather to the absence of central guidance and coordination. Let us hope that UNISIST can meet this need.[8]

In 1974, a second Intergovernmental Conference was convened which recommended implementation of a new UNESCO programme, independent of UNISIST, to define the requirements of national information systems, plan national systems, and promote universal bibliographic control.[9,2] The new programme, NATIS, overlapped substantially with the objectives of UNISIST and competition between the two programmes soon developed into a political struggle for separate identities and financial support.

To resolve this difficulty, the Director-General recommended at the 1976 UNESCO General Conference that the two programmes be merged into a single General Information Programme (PGI). The objectives of the General Information Programme have been summarized by Lowell Hattery as:

(1) promotion of the formulation of information policies and plans (national, regional, and international);

(2) promotion and dissemination of methods, norms, and standards for information handling;

(3) contributing to the development of information infrastructures (i.e., systems and services);

(4) contributing to the development of specialized information systems in the field of education, culture and communication, as well as the natural and social sciences; and

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(5) promotion of the training and education of specialists in, and users of, information.[199]

Despite the unification of the two programmes by the merger, the Intergovernmental Conference recommended continuing use of the name UNISIST for activities in the field of scientific and technical information, and of the name NATIS for the overall planning of national information systems.[200] As the objectives of the General Information Programme suggest, the scope of UNISIST became somewhat broadened by its incorporation within PGI. However, the emphasis of UNISIST at this time was still on the promotion of an international framework within which national and international systems could develop.[201]

The late 1970's were characterized by a change in the perspective of many national governments, ranging from redefinition of socio-economic imperatives at the national and international levels to redefinition of information needs in the various Member States of the United Nations, particularly the developing countries.[202] These changes led to the convening of the Intergovernmental Conference on Scientific and Technological Information for Development (UNISIST II), from May 28 to June 1, 1979, to assess the role of scientific and technical information in socio-economic development and to identify key issues.

The UNISIST II conference was marked by conflict between developed and developing nations. Underlying the debate was an awareness of the importance of information resources in the new international economic order, and the feeling of delegates from developing countries that, for reasons of national and commercial interest, both east and west were

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holding back information important for development. Perhaps one of the more significant and positive outcomes of the UNISIST II Conference was the consensus to not form a separate UN agency to deal with Scientific and Technical Information (STI) for development; the delegations strongly defended UNISIST against encroachment and gave strong support to the programme's overall activities, achievements, and goals. Nevertheless, the conference resulted in a definite change of focus in UNISIST's objectives from systems compatibility and standardization to STI for developing nations.

This gradual shift in UNISIST's emphasis has been rationalized and summarized by Harold Dierickx.

> At the time of UNISIST I, government involvement in the collection and dissemination of scientific information was still very much assumed if not universally advocated. Much attention was also being paid in the professional literature to avoid duplication as well as gaps, by means of setting up co-operative networks of information systems and services and facilitating exchanges through promoting the introduction of international standards...By the time the UNISIST II...conference took place, the call for international division of labour and standardization had become somewhat muted. Instead, aspects such as the security of proprietary and personal information, copyright, the introduction of new information technology, and the development of privately owned information services to encourage competition, had come increasingly to the fore... (At the same time,) the exchange of scientific and technical information is considered as a means of fostering economic, social and cultural development, in particular with regard to the developing countries. This point of view is clearly endorsed by UNISIST II...''

Thus, the tension between scientific and technical information as a marketable commodity on the one hand, and as an essential resource needed for development on the other, has forced UNISIST to re-evaluate its role in international scientific communication and information transfer.

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What implications does this have for the future of UNISIST? Wesley-Tanaskovic points out that:

> as a prerequisite for the incorporation of science into socio-economic and cultural development, science information exchange must be viewed as a two-way communication channel between science and the rest of society. For the future, to achieve the unimpeded circulation of the broadly conceived scientific and technological information to and from its manifold producers and consumers, it will be necessary to reshape the existing services and/or eventually to establish new, world-wide information systems with the active participation of all nations...Experiences already acquired, particularly by Unesco within the UNISIST programme..., could help to establish novel mechanisms for information exchange. This latter concept should preferably supercede the information dissemination concept used so far in international science and technology.[282]

UNISIST has accomplished a great deal since its inception in 1972 and implementation in 1973, generating such products as the Common Communication Format (CCF), the International Information Centre for Terminology (INFOTERM), the International Serials Data System (ISDS), the Science and Technology Policies Information Exchange System (SPINES), and the International Centre for Bibliographic Descriptions (UNIBID), as well as coordinating numerous other international information activities. However, it is clear that UNISIST must be responsive to the changing socio-economic climate of international relations, and concentrate on information exchange rather than information dissemination if it is to remain a viable programme in the future. Given the importance of such a programme, though, and its many successes to date, we can be confident that UNISIST will continue to evolve to meet the challenges of a dynamic social, economic, and political environment.

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1.
Ad Hoc Comm. Educ. & Training Policy & Prog., 3rd session. 1978. Final report. Publ. PGI/E.T.III/5. Paris:Unesco. 13 p.

2.
Adam, R. 1975. A world information system for the social sciences. Aslib Proc. 27(7): 286-93.

3.
Adams, A. & J.A. Werdel. 1975. Cooperation in information activities through international organizations. Ann. Rev. Info. Sci. & Tech. 10: 303-56.

4.
Adams, S. 1970. UNISIST: a progress report. In: Handling of nuclear information. Proc. Symp. Int. Assoc. Atomic Energy Agency. Vienna: IAEA. pp. 599-606.

5.
Adams, S. 1976. Information policy for development: national and international responsibilities. Paris: Unesco. 19 p.

6.
Adams, S. 1978. Management of info. resources at the nat. level. Main issues raised at UNISIST Meeting on Plan. & Implement. of Nat. Info. activities in science & tech. ERIC. ED-229-012.

7.
Adams, S. 1980. Information for problem-solving in socio-economic development. Publ. PGI.80/WS/26. Paris:Unesco. 25 p.

8.
Adams, S. et al. 1972. UNISIST: a forum. Aslib Proc. 24(2): 111-22.

9.
Advisory Comm. General Info. Prog., 1st session. 1977. Final report. Publ. PGI/ADV.COM./I/15. Paris:Unesco. 28 p.

10.
Aiyepeku, W.O. 1974. UNISIST: its implications for scientific and technological information policies in Nigeria. Nigerian Libr. 10(2&3): 117-29.

11.
Albertus, U. 1981. The role of Unesco/PGI in the development of information systems and services in Latin America and the Caribbean. Unesco J. Info. Sci., Libr. & Archives Admin. 3(2): 74-80.

12.
Anon. 1970. Fourth session of the joint Unesco-ICSU central committee to study the feasibility of a world science information system (UNISIST). Bibliog., Documen., Terminology 10: 45-7.

13.
Anon. 1970. Unesco-ICSU central committee, fourth session. Unesco Bull. Libr. 24: 167-8.

14.
Anon. 1971. FID-IFLA comments on UNISIST recommendations (draft). IFLA News (37): 10-11.

15.
Anon. 1971. ICSU/UNESCO World Science Information System (UNISIST) feasibility study completed; recommendations published in preparation for October Intergovernmental Conference; US info leaders present comments. Information 3(3): 113-33.

16.
Anon. 1971. Sci-tech publishers wary about proposed Unesco information network. Pub. Wkly. 200: 28.

17.
Anon. 1972. Implementation of UNISIST. FID News Bull. 22: 42.

18.
Anon. 1972. Intergovernmental conference for the establishment of a World Science Information System (UNISIST). Bibliog., Documen., Terminology 12: 2-3.

19.
Anon. 1972. UNISIST working group on systems interconnection. Bibliog., Documen., Terminology 12: 162-3.

20.
Anon. 1973. UNISIST international serials data system. J. Libr. Automation 6: 265-7.

21.
Anon. 1974. International activities. Bibliography, Documentation, Terminology 14(6): 311.

22.
Anon. 1974. International centre for terminology (INFOTERM) was established in 1971 within the framework of UNISIST. FID News Bull. 24: 29.

23.
Anon. 1974. Incorporating the social sciences into UNISIST. Unesco Bull. Libr. 28: 342.

24.
Anon. 1974. National library and UNISIST. Aust. Libr. J. 23: 326-7.

25.
Anon. 1974. SLA opposes the splitting of UN libraries. Lib. J. 99: 2790.

26.
Anon. 1974. UNISIST-related projects in Columbia, Bulgaria and Indonesia. Information: Part 1. 6: 75.

27.
Anon. 1974. UNISIST studies the effects of the application of information. Info.: News & Sources 6: 297.

28.
Anon. 1974. UNISIST seeks broad classification scheme. Information: Part 1. 6: 41.

29.
Anon. 1975. International information centre for terminology (INFOTERM). Unesco Bull. Libr. 29: 106.

30.
Anon. 1975. NATIS news. Unesco Bull. Libr. 29(6): 298-302.

31.
Anon. 1975. UNISIST information center on bibliographic descriptions. Info.: News & Sources 7: 166.

32.
Anon. 1975. UNISIST: Information policy objectives (UNISIST proposals), scientific libraries. IFLA J. 1(1): 72-3.

33.
Anon. 1975. UNISIST: indexing principles. [First Draft] Paris: Unesco.

34.
Anon. 1975. Unesco to spend $1.9 million on science information services. Info.: News & Sources 7: 263.

35.
Anon. 1976. Focus on UNISIST programmes: proposed general outline of UNISIST programme for 1977-1978. Annals Libr. Sci. & Docum. 23(3): 245-6.

36.
Anon. 1976. International referral centre for information handling equipment has been formed within the framework of UNISIST. Info. Hotline 8: 1.

37.
Anon. 1976. The name 'UNISIST'. FID News Bull. 26: 140.

38.
Anon. 1976. UNISIST centre for bibliographic description. IFLA J. 2(2): 128.

39.
Anon. 1976. UNISIST International Centre for Bibliographic Descriptions. Brit. Libr. Res. & Dev. Newsletter (7): 1.

40.
Anon. 1976. UNISIST international centre for bibliographic descriptions. Info. Hotline 8: 9.

41.
Anon. 1976. Unesco/UNISIST programme development. FID News Bull. 26: 80.

42.
Anon. 1977. Science information policy in Iran. FID News Bull. 27: 38.

43.
Anon. 1977. The role of national libraries in national and international information systems: a policy statement approved by directors of national libraries meeting in Lausanne, 20-21 August 1976. Unesco Bull. Libr. 31(1): 7-25.

44.
Anon. 1977. The UNISIST draft on indexing principles: text and comments. Intern. Classif. 4(1): 29-34.

45.
Anon. 1977. UNISIST international seminar on indexing in Warsaw from 21 to 25 June 1976. Unesco Bull. Libr. 31: 51.

46.
Anon. 1977. UNISIST working groups. Bibliography, Documentation, Terminology 17: 130.

47.
Anon. 1978. First UNISIST meeting on regional information policy and planning in South East Asia. Bibliog., Documen., Terminology 18: 2.

48.
Anon. 1978. International information networks and their role in the transfer of educational experience. Unesco Bull. Libr. 32(4): 237-51.

49.
Anon. 1978. International network for the exchange of technological information. Unesco Bull. Libr. 32: 348-9.

50.
Anon. 1978. Section D: Organization and administration of information networks. In: Proc. 5th World Congr. IAALD. P. Velasquez & R. Nadurille (eds.) Mexico City: Instituto Nacional de Investigaciones Agricolas. pp. 215-300.

51.
Anon. 1978. The problem of information at the national and international level which is posed by the improvement of educational systems. Unesco Bull. Libr. 32(4): 216-36.

52.
Anon. 1978. UNISIST programme in Australia 1974-7. Int. Libr. Rev. 10(2): 155-78.

53.
Anon. 1979. Broad system of ordering. Informatologica Yugoslavica 11(3/4): 25-32.

54.
Anon. 1979. UNISIST II: Intergovernmental conference on scientific and technological information for development. IFLA J. 5(4): 328-30.

55.
Anon. 1981. Norms and standards in information work. Unesco J. Info. Sci., Libr. & Archives Admin. 3(3): 159-60.

56.
Anon. 1981. Report of Z39: Unesco/PGI. J. Libr. Automation 14: 58-9.

57.
Anon. 1983. Unesco science and technology activities in Asia and the Pacific. Science Policy Stud. & Docum. No. 51. Paris: Unesco. 37 p.

58.
Anon. 1984. Science and technology programs in Unesco; summary of a congressional research service report. ASIS Bull. 10: 9-10.

59.
Arntz, H. 1969. [The ICSU/UNESCO project (UNISIST).] Nachr. Dokum. 20(1): 36-8.

60.
Arutjunov, N.B. 1979. The system of international exchange of scientific and technological information: the USSR's participation. Unesco J. Info. Sci., Librarianship & Archives Admin. 1(3): 210-14.

61.
Arutyunov, N.B. 1973. The requirements to be met by national scientific and technical information systems. Unesco Bull. Libr. 27(5): 246-9.

62.
Atherton, P. 1977. Handbook for information systems and services. Paris: Unesco. 258 p.

63.
Atherton, P. 1975. Guidelines for the organization of training courses, workshops and seminars in scientific and technical information and documentation. Publ. SC.75/WS/29. Paris:Unesco. 88 p.

64.
Austin, D. & J. Waters. 1980. Guidelines for the establishment and development of multilingual thesauri; revised text. Publ. PGI.80/WS/12. Paris:Unesco. 87 p.

65.
Baker, F. 1979. Science information and information science: the role of ICSU. Unesco J. Info. Sci., Libr. & Archives Admin. 1(4): 233-41.

66.
Borko, H. & M. Menou. 1983. Index of Information Utilization Potential (I.U.P.). Publ. PGI.83/WS/29. Paris:Unesco. 102 p.

67.
Bousso, A.A. 1980. Evaluation of three training courses organized by Unesco in 1978. Publ. PGI/E.T.IV/7. Paris:Unesco. 14 p.

68.
Brown, H. 1971. UNISIST: growing interest in a worldwide science information system. J. ASIS 22: 288-9.

69.
Brown, J.E. 1975. Canadian contribution to UNISIST: developing SDI services. Can. Libr. J. 32(6): 451-5.

70.
Burchinal, L.G. 1976. New emphasis for UNISIST. ASIS Bull. 2: 9.

71.
Cannon, T.H. 1978. Methodology for information manpower forecasting. Publ. PGI/E.T.III/INF.4. Paris:Unesco. 45 p.

72.
Chandler, G. 1977. Planning national information systems: Australia with some reference to New Zealand and Papua New Guinea. Unesco Bull. Libr. 31(2): 98-106.

73.
Cherns, J. 1983. Availability and use of official publications in libraries. Publ. PGI.83/WS/30. Paris:Unesco. 140 p.

74.
Clark, D. 1978. Helping librarians to help their users. Unesco Bull. Libr. 32(6): 363-74.

75.
Coates, E. et al. 1978. BSO: Broad System of Ordering. Schedule and Index. 3rd revision. FID Publ. 564. The Hague:FID; Paris:Unesco. 200 p.

76.
Coates, J. 1980. The Broad System of Ordering (BSO). In: New trends in documentation and information. P. Taylor (ed.). London: Aslib. pp. 259-73.

77.
Coates, J. 1981. The Broad System of Ordering: the compilers reply to their critics. Int. Forum Inf. Docum. 6(1): 24-30.

78.
Coblans, H. 1970. Control and use of scientific information. Nature 226(5243): 319-21.

79.
Coblans, H. 1972. From the computer on to UNISIST. Physics Bull. 23: 527-9.

80.
Cook, M. 1982. Guidelines for curriculum development in records management and the administration of modern archives: a RAMP study. Publ. PGI.82/WS/16. Paris:Unesco. 74 p.

81.
DEVSIS Study Team. 1976. DEVSIS: the preliminary design of an international system for the development sciences. Ottawa: Int. Dev. Res. Centre. 247 p.

82.
David, A. 1974. [International symposium on multilingual thesauri.] [Fr] Documentaliste 11(1): 41-2.

83.
Dettart, F.E. 1982. Topic relevance and BSO switching effectiveness. Intern. Classif. 9(2): 71-6.

84.
Dewez, M. 1976. [Comparison of the INTERMARC and UNISIST exchange formats for monographs.] [Fr.] Cah. Docum. (1): 13-30.

85.
Dezelic, G. 1980. [International system for scientific and technological information. Development up to date and in future.] [Croatian] Informatologica Yugoslavica 12(1/2): 1-6.

86.
Dierickx, H. 1978. UNISIST International Centre for Bibliographic Descriptions (UNIBID): a review of objectives, activities to date and future development. Unesco Bull. Libr. 32(3): 157-60, 185.

87.
Dierickx, H. 1983. The UNISIST reference manuals and UNIBID - standardization for development. Program 17(2): 68-85.

88.
Duchein, M. 1983. Obstacles to the access, use and transfer of information from archives: a RAMP study. Publ. PGI.83/WS/20. Paris:Unesco. 80 p.

89.
Duchesne, R. 1977. The role of national libraries in national and international information systems. Unesco Bull. Libr. 31(1): 7-25.

90.
Emptoz, G. 1982. Inventory of data sources in science and technology; a preliminary survey. Paris:Unesco. 229 p.

91.
Evans, A.J. 1972. Meeting of non-governmental organizations with a particular interest in UNISIST and its implementation. IFLA News (41): 22-3.

92.
Evans, A.J. et al. 1977. Education and training of users of scientific and technical information UNISIST guide for teachers. Paris: Unesco. 143 p.

93.
Evans, F. & E. Ketelaar. 1983. A guide for surveying archival and records management systems and services: a RAMP study. Publ. PGI.83/WS/6. Paris:Unesco. 30 p.

94.
Evans, F. 1982. Unesco and archives development. Unesco J. Info. Sci., Libr. & Archives Admin. 4(3): 159-76.

95.
Evans, F. 1983. Writings on archives published by and with assistance of Unesco: a RAMP study. Publ. PGI.83/WS/5. 33 p.

96.
Expert Consultation on RAMP, 2nd, Berlin, Germany. 1982. Final report. Publ. PGI.82/WS/24. Paris:Unesco. 54 p.

97.
Ford, G. & C. Harris. 1981. Guidelines on studies of information users; pilot version. Publ. PGI.81/WS/2. Paris:Unesco. 63 p.

98.
Ford, G. (ed). 1978. UNISIST guidelines for the conduct of user studies. Paris: Unesco. 192 p.

99.
Geh, H.P. 1973. Meeting of non-governmental organizations on the implementation of UNISIST. IFLA News (45): 9-10.

100.
Goodman, H.J. 1972. The establishment of UNISIST- the world science information network- as a step towards the development of the World Brain. In: Proc. 4th Ann. Meet. ASIS, West. Canada Chap., A. Piternick (ed.) Vancouver: U.B.C. pp. 37-40.

101.
Granheim, E. 1978. UNISIST + NATIS = GIP(PGI). Bok og Bibl. 45(1): 3-4.

102.
Gray, J. 1977. Unesco in the information field. Libr. Assoc. Rec. 79(10): 569,573.

103.
Gray, J. 1979. Information policy and planning for economic and social development: a dynamic approach. Publ. PGI/UNISIST/LA/I/3. Paris:Unesco. 30 p.

104.
Green, S. 1977. The organization and planning of library activities in the United Kingdom in the context of NATIS. Unesco Bull. Libr. 31(2): 68-76.

105.
Grolier, E. 1982. Register of education and training activities in librarianship, information science and archives. Paris:Unesco. 61 p.

106.
Grunewald, H. 1979. Guidelines for editors of scientific and technical journals. Publ. PGI.79/WS/8. Paris:Unesco. 36 p.

107.
Guha, B. 1974. The origin, objectives and programmes of UNISIST. Libr. Her. 16(1&2): 1-13.

108.
Hallgren, S. 1978. Taormina principle - a report from a Sicilian week of bibliographic conferences sponsored by UNISIST and ISO. Tid. Dok. 34(3): 51-2.

109.
Hattery, L.H. (ed.) 1979. UNISIST II: special report. Info. Retrieval & Libr. Auto. 15(1): 1-12.

110.
Hattery, L.H. 1979. UNISIST 2: special report. Mt. Airy, MD: Lomond Publ. 14 p. [ERIC report ED-180 481].

111.
Hattery, M. 1980. Information for development: carrying on from UNISIST II. Info. Retrieval & Libr. Auto. 15(12): 1-3.

112.
Havlicek, K. 1982. [20th UNESCO General Conference has revealed main lines of the further development of international information.] [Czech.] Technicka Knihovna 26(2): 35-42.

113.
Hildesheimer, F. 1983. Guidelines for the preparation of general guides to national archives: a RAMP study. Publ. PGI.83/WS/9. Paris:Unesco. 79 p.

114.
Hissink, M.D. 1976. Computerized services and the role of UNISIST. Proc. 43rd Conf. N.Z. Libr. Assn., pp. 34-5.

115.
Hopkinson, A. 1984. Unesco general information programme and standardization: activities and publications. State Libn. 32: 24-5.

116.
Hopkinson, A. 1984. International access to bibliographic data. MARC and MARC-related activities. J. Docum. 40(1): 13-24.

117.
Hopkinson, A. 1983. New technology and exchange formats. J. Info. Sci. Princ. & Prac. 7(4): 139-47.

118.
Horton, A. 1972. UNISIST: dream or reality? LASIE 2: 15-21.

119.
Hungarian Central Tech. Libr. & Docum. Centre. 1976. UNISIST international symposium of information systems and services in ongoing research in science: proceedings. Budapest: OMKDK-Technoinform. 469 p.

120.
IDRC. 1980. International cooperative information systems. Ottawa: Intern. Develop. Research Centre. 111 p.

121.
IFLA. 1971. Statement on UNISIST. IFLA News (37): 12.

122.
IFLA. 1982. Guidelines for the compilation of union catalogues of serials. Publ. PGI.83/WS/1. Paris:Unesco. 29 p.

123.
Intergov. Council Gen. Info. Prog., 1st session. 1977. Final report. Publ. PGI/COUNCIL/I/7. Paris:Unesco. 39 p.

124.
Intergov. Council Gen. Info. Prog., 1st session. 1977. General Information Programme: a review of current projects. Publ. PGI/COUNCIL/I/4. Paris:Unesco. 44 p.

125.
Intergov. Council Gen. Info. Prog., 4th session. 1983. Final report. Publ. PGI.83/COUNCIL IV/5. Paris:Unesco. 23 p.

126.
Intergov. Council Gen. Info. Prog., 3rd session. 1981. Recommendations concerning the Second Medium-term plan as regards the General Information Programme. Publ. PGI/81/COUNCIL/III/6. Paris:Unesco. 30 p.

127.
Intergov. Council Gen. Info. Prog., 2nd session. 1979. UNISIST International Serials Data System: medium-term plan and scale of contributions, 1980-83. Publ. PGI/COUNCIL/II/BD.3. Paris:Unesco. 24 p.

128.
Intergov. Council Gen. Info. Prog., 2nd session. 1979. Final report. Publ. PGI/COUNCIL/II/5. Paris:Unesco. 29 p.

129.
Intergovernmental Conference on Scientific and Technological Information for Development. 1979. UNISIST 2. Main working document. Paris, France: Unesco. 148 p. [ERIC report ED-180 465].

130.
Intergovernmental Conference on Scientific and Technological Information for Development. 1979. Final report. Publ. PGI/MD/1. Paris:Unesco. 69 p.

131.
Intern. Congr. on UAP, Paris. 1982. Summary of research on the UAP Programme. Publ. PGI.82/UAP/3. Paris:Unesco. 52 p.

132.
Intern. Congr. on UAP, Paris. 1982. Contributions on copyright. Publ. PGI.82/UAP/6. Paris:Unesco. 23 p.

133.
Intern. Congr. on UAP, Paris. 1982. Main working document including annotated programme and summary. Publ. PGI.82/UAP/2. Paris:Unesco. 96 p.

134.
Iranian Docum. Centre. 1977. UNISIST seminar on the development of Iranian national science information policy. Final report. Tehran: Iranian Docum. Centre. 78 p.

135.
Japan Documentation Society (NIPDOK). 1975. Proc. of UNISIST training course on networking and systems interconnection in southeast Asia, 1974. Tokyo: Japan Docum. Soc. 169 p.

136.
Kanevsky, B.P. 1972. International exchange of publications and the free flow of books. Unesco Bull. Libr. 26: 141-9.

137.
Karlander, B. et al. 1977. Information networks for on-line bibliographic retrieval. Publ. PGI.77/WS/4. Paris:Unesco. 141 p.

138.
Keren, C. & I. Sered. 1983. International inventory of software packages in the information field. Publ. PGI.83/WS/28. Paris:Unesco. 605 p.

139.
Keren, C. & L. Harmon. 1980. Information services issues in less developed countries. Ann. Rev. Info. Sci. & Tech. 15: 289-324.

140.
Kochen, M. 1972. WISE: a World Information Synthesis and Encyclopaedia. J. Doc. 28: 322-43.

141.
Koster, C.J. 1973. International Standard Serial Numbers and the International Serials Data System. Libri 23(1): 70-72.

142.
Koster, C.J. 1973. ISDS and the functions and activities of national centres. Unesco Bull. Libr. 27(4): 199-204.

143.
Kula, S. 1983. The archival appraisal of moving images: a RAMP study with guidelines. Publ. PGI.83/WS/18. Paris:Unesco. 130 p.

144.
Lancaster, F. 1975. Guidelines for the evaluation of training courses, workshops and seminars in scientific and technical information and documentation. Publ. SC.75/WS/44. Paris:Unesco. 100 p.

145.
Lancaster, F. 1978. Guidelines for the evaluation of information systems and services. Publ. PGI.78/WS/18. Paris:Unesco. 169 p.

146.
Lancaster, F.W. & L.C. Smith. 1983. Compatability issues affecting information systems and services. ERIC document. 228 p. ED-241-018.

147.
Lindquist, M. 1982. Scientific and technical information: Democratic People's Republic of Korea. Publ. FMR/PGI/82/120. Paris:Unesco. 21 p.

148.
Litukhin, Y.I. 1978. Information please: towards a world science information network. Unesco Courier 31: 8-9.

149.
Lloyd, G. 1979. BSO - Broad System of Ordering. Arlington, VA: Educational Resources Info. Centre. 10 p. [ERIC report ED-186 005].

150.
Lloyd, J. 1975. International programs/issues. Bull. ASIS 1(7): 7, 32-3.

151.
Lohner, M. 1974. UNISIST. In: First European Congr. on Docum. Systems & Networks. Luxembourg: Commission of European Communities. pp. 312-5.

152.
Lohner, W. 1975. Standardization and compatibility issues in the UNISIST programme. In: Information systems: their interconnection and compatibility. Vienna: Int. Atomic Energy Agency. pp. 365-70.

153.
Lohner, W. 1977. Normative activities in the UNISIST programme. Int. Forum Inf. Docum. 2(2): 37-9.

154.
M'Baye, S. 1981. ASCOBIC manual on bibliographic control in Africa. Publ. PGI.81/WS/29. Paris:Unesco. 61 p.

155.
Madeley, H. 1983. The Broad System of Ordering. Australian Academic & Research Libraries 14(4): 235-46.

156.
Mangla, P.B. 1976. UNISIST: a world science information system. J. Libr. Inf. Sci. (India) 1(1): 33-62.

157.
Martin, M.D. & C.I. Barnes. 1970. Report on the feasibility of an International Serials Data System, and preliminary systems design. Paris:ICSU. 110 p.

158.
Martin, M.D. 1975. Reference manual for machine-readable bibliographic descriptions. Info.: Rept. & Bibliog. 4(2): 1-56.

159.
Martinsson, A. 1983. Guide for the preparation of scientific papers for publication, 2nd ed. Publ. PGI.83/WS/10. Paris:Unesco. 13 p.

160.
Mazumdar, A. 1982. Consolidation of information: biogas handbook. Publ. PGI/82/WS/19. Paris:Unesco. 133 p.

161.
Meyriat, J. 1974. [On the possibility of extending the UNISIST program to social sciences.] [Fr.] Inspel 9(3): 5-13.

162.
Meyriat, J. 1980. International and regional cooperation in social science documentation. Unesco J. Info. Sci., Libr. & Archives Admin. 2(4): 227-33.

163.
Michel, J. 1977. National focal points and UNISIST national committees. Int. Forum Inf. Docum. 2(2): 8-9.

164.
Mohammadally, R. 1983. Introduction to Unesco's General Information Programme (PGI): PGI and Pakistan. Pakistan Lib. Bull. 14: 1-14.

165.
Moideen, P. 1983. A survey of archives relating to India and located in major repositories in France and Great Britain. Publ. PGI.83/WS/19. Paris:Unesco. 69 p.

166.
Moldoveanu, V. 1975. UNISIST and the possible solution of the 'information revolution' problems. Probleme de Informare de Documentare 9(4): 226-35.

167.
Moore, N. 1982. Survey of library information manpower needs in the Caribbean; preliminary version. Publ. PGI.82/WS/15. Paris:Unesco. 160 p.

168.
Morgan de Goni, P. 1981. The experience of Peru in planning a development-oriented approach to information. Unesco J. Info. Sci., Libr. & Archives Admin. 3(2): 125-31.

169.
Murphy, D. 1979. Statistics on scientific and technical information and documentation; a methodological approach. Publ. PGI.79/WS/5. Paris:Unesco. 37 p.

170.
National Library of Australia. 1978. Progress in UNISIST activity: the first three years of the UNISIST programme in Australia, 1974-77. Canberra: Nat. Libr. Australia. 33 p. [ERIC:ED-163-897].

171.
Neelameghan, A. 1984. International and regional cooperation in human resources development for information services in developing countries. A case study. Educ. for Info. 2(3): 191-208.

172.
Neelameghan, A. 1978. Guidelines for formulating policy on education, training and development of library and information personnel. Publ. PGI.78/WS/29. Paris:Unesco. 38 p.

173.
Neelameghan, A. 1975. DEVSIS: a global information system for socio-economic development. Libr. Sci. Slant Docum. 12(2): 55-63.

174.
Neelameghan, A. & J. Tocatlian. 1977. UNISIST activities in education, training and manpower development in the information field. Int. Forum Inf. Docum. 2(2): 28-32.

175.
Nie, C. 1980. Chinese scientific and technical information: present status and future prospects. Unesco J. Info. Sci., Libr. & Archives Admin. 2(3): 74-7.

176.
Ootuka, H. 1975. [UNISIST training course on information networking and systems interconnection in southeast Asia.] [Japanese] Dokumentesyon Kenkyu 25(1): 21-4.

177.
Page, John. 1978. Information systems and networks for technology transfer: final report. Paris: Unesco. 311 p.

178.
Penna, C.V. 1971. Seminar on planning of national scientific and technical information structures. Unesco Bull. Libr. 25: 186-90.

179.
Perez-Vitoria, A. 1982. La informacion en el marco de la cooperacion cientifica internacional. [Information in the context of international scientific cooperation.] Inforum (1): 1-31.

180.
Perez-Vitoria, A. 1969. Towards a world science information system: an ICSU-UNESCO joint venture. Unesco Bull. Libr. 23(1): 2-7.

181.
Piggot, M. 1983. Standards for information handling. Indexer (G.Brit.) 13(4): 247-8.

182.
Podoinitsin, V.G. & A. Winters. 1977. Regional cooperation in information policy and planning. Int. Forum Inf. Docum. 2(2): 10-12.

183.
Raizada, A. 1977. The Rabat workshop; a pointer for resource mobilization. Unesco Bull. Libr. 31(1): 35-9.

184.
Raizada, A.S. & F.J. Devadasson. 1976. CHEM/SDI service: performance of CAN/SDI software. Annals Libr. Sci. & Docum. 23(2): 179-88.

185.
Rastogi, T. 1982. Consolidation of information: windpump handbook. Publ. PGI/82/WS/17. Paris:Unesco. 174 p.

186.
Rastogi, T. 1982. Consolidation of information: review of literature on promotion of windpumps. Publ. PGI.82/WS/18. Paris:Unesco. 43 p.

187.
Rhoads, J. 1982. The applicability of UNISIST guidelines and ISO international standards to archives administration and records management: a RAMP study. Publ. PGI.82/WS/4. Paris:Unesco. 95 p.

188.
Rhoads, J. 1983. The role of archives and records management in national information systems: a RAMP study. Publ. PGI.83/WS/21. Paris:Unesco. 56 p.

189.
Riggs, F.W. et al. 1975. Call for action on social science information. ASIS Bull. 2: 27-8.

190.
Romerio, G. 1977. A regional centre for scientific and technological information transfer: Iran. Publ. FMR/BEP/PGI/77/306. Paris:Unesco. 31 p.

191.
Rosenbaum, M. 1972. International Serials Data System. Intern. Cat. 1(4): 4-6.

192.
Rybatchenkov, V. 1973. [The UNISIST programme: its aims and development.] [Fr.] Documentaliste 10(4): 189-91.

193.
Rybatchenkov, V. 1974. Development of a Broad System of Ordering for UNISIST purposes. Intern. Classif. 1(1): 20-21.

194.
Rybatchenkov, V. 1977. UNISIST activities in the fields of data handling, compilation, evaluation and dissemination. Int. Forum Inf. Docum. 2(2): 35-6.

195.
SLA. 1977. Resolution concerning the Unesco programme for information, documentation, libraries and archives. Spec. Libr. 68: 51-2.

196.
Samaha, E. 1978. A study on the application of scientific and technological information in development; field study in Tanzania. Publ. PGI.78/WS/6. Paris:Unesco. 89 p.

197.
Samaha, E. 1978. Research information in progress: a survey and analysis of systems and services in developing countries. Unesco Bull. Libr. 32(5): 322-32.

198.
Samarasinghe, L.E. & G.F. Romerio. 1977. Development of national scientific and technological information systems within the framework of UNISIST. Int. Forum Inf. Docum. 2(2): 13-15.

199.
Saracevic, T. & J. Wood. 1981. Consolidation of information: a handbook on evaluation, restructuring and repackaging of scientific and technical information. Publ. PGI.81/WS/16. Paris:Unesco. 327 p.

200.
Sarkisyan, D.B. 1977. [Foreign automated information systems: UNISIST.] [Russ] Naucho-Tekhnicheskaya Informatsiya. Series 1. (10): 17-22.

201.
Sarkisyan, D.B. 1975. [Information on periodicals in the UNISIST program: International Periodical Data System.] [Russ] Nauchno-Tekhnicheskaya Informatsiya. Series 1. (1): 17-20.

202.
Sarkisyan, D.B. 1977. [Automated information systems as the foundation for UNISIST.] [Russ.] Nauch.-Tekh. Inf., Series 1(10): 17-22.

203.
Saunders, W. 1978. Guidelines for curriculum development in information studies. Publ. PGI.78/WS/27. Paris:Unesco. 38 p.

204.
Saunders, W.L. 1976. A comparative analysis of UNISIST short courses. ERIC:ED-143-356. 32 p.

205.
Schur, H. 1980. Study of past, current and planned activities in education and training. Publ. PGI/E.T.IV/3. Paris:Unesco. 53 p.

206.
Schur, H. 1982. Aspects of UNISIST activities in education and training for information, library and archives work. In: Organization and economics of information and documentation. The Hague:FID. pp. 150-61.

207.
Seshasayee, R. 1983. Thailand: telecommunication services for the transfer of information and data. Publ. PGI.83/CONF.801/INF.4. Paris:Unesco. 28 p.

208.
Silvestri, G. 1977. The activities of the Austrian National Committee for UNISIST, with a view to special libraries. Inspel 12(2): 15-9.

209.
Simmons, P. 1981. A common communication format for bibliographic exchange. Unesco J. Info. Sci., Libr. & Archives Admin. 3(3): 161-4.

210.
Slamecka, V. 1979. Implications of modern information technology for National Information Policy and Planning. Paris: Unesco. 13 p.

211.
Smith, J.R. 1970. The feasibility of a world system: UNISIST by ICSU out of UNESCO. Aslib Proc. 22(8): 395-8.

212.
Somers, H.L. 1981. Observations on standards and guidelines concerning thesaurus construction. Intern. Classif. 8(2): 69-74.

213.
Soosai, J.S. 1984. UNISIST working group on information analysis and consolidation. IFLA J. 10(1): 92-4.

214.
Sorokin, J.N. 1976. Ways of solving the compatibility problem in the international scientific and technical information system. In: Proc. UNISIST Int. Symp. Inf. Sys. & Services in Ongoing Res. in Sci., pp. 391-7.

215.
Stark, M. 1983. Development of records management and archives services within United Nations agencies: a RAMP study with guidelines. Publ. PGI.83/WS/26. Paris:Unesco. 215 p.

216.
Sylvestre, Guy. 1972. The UNISIST conference. Can. Libr. J. 29(2): 91-7.

217.
Tata Energy Res. Inst. 1982. Consolidation of information: a review of the literature on promotion of biogas systems. Publ. PGI.82/WS/21. Paris:Unesco. 76 p.

218.
Tata Energy Res. Inst. 1982. Consolidation of information: cooking stoves handbook. Publ. PGI/82/WS/20. Paris:Unesco. 247 p.

219.
Tell, B. 1973. [UNISIST - a programme for international cooperation in the area of scientific and technical information.] [Swedish] Tidsk. Dokum. 29(5): 122-5.

220.
Tell, B. 1975. Government policies for library network development with special emphasis on UNISIST and OECD recommendations. In: The interactive library. S. Schwarz (ed.) Stockholm: Swed. Soc. Tech. Docum. pp. 29-48.

221.
Thompson, A. 1983. Guide to the production and use of audiovisual aids in library and information science teaching. Publ. PGI.83/WS/17. Paris:Unesco. 127 p.

222.
Tirmizi, S. 1982. Guide to records relating to science and technology in the National Archives of India: a RAMP study. Publ. PGI.82/WS/12. Paris:Unesco. 83 p.

223.
Tocatlian, J. 1973. UNISIST implementation plans. In: A world of information, J.H. Wilson (ed). Westport,CT: Greenwood Press. pp. 9-14.

224.
Tocatlian, J. 1978. Training information users: programmes, problems, prospects. Unesco Bull. Libr. 32(6): 355-62.

225.
Tocatlian, J. 1971. World science information system. Scholarly Publishing 2: 203-7.

226.
Tocatlian, J. 1975. International information systems. Advances in Librarianship 5: 1-60.

227.
Tocatlian, J.J. 1970. UNISIST: a world science system - joint project of the United Nations Educational, Scientific and Cultural Organ. (UNESCO) and the Intern. Council of Science Unions (ICSU). Revista dell'Informazione 1(6): 121-5.

228.
Trask, M. 1983. Course for trained teachers responsible for the school library; preliminary version. Publ. PGI.83/WS/14. Paris:Unesco. 5 p.

229.
Trask, M. 1983. Course for all teachers on the use of information resources and libraries by teachers. Publ. PGI.83/WS/11. Paris:Unesco. 224 p.

230.
Turkov, Z. & A. Chepkasov. 1975. Planning & development of INIS: its application of UNISIST principles and its interconnection with other intern. & nat. systems. In: Info. systems: their interconnection and compatiblity. Vienna:IAEA, 15-34.

231.
UNISIST Newsletter. 1no.1- (1973-). Paris: Unesco, General Information Programme. q.

232.
Unesco & ICSU. 1970. UNISIST: synopsis of the feasibility study on a world science information system. Paris: Unesco. 92 p.

233.
Unesco & Smithsonian Sci. Info. Exchange. 1976. Proc. UNISIST international symposium on information systems and services in ongoing research in science. Budapest: Hungarian Central Tech. Libr. & Docum. Centre. 496 p.

234.
Unesco. 1971. UNISIST: study report on the feasibility of a world science information system. Paris: Unesco. 161 p.

235.
Unesco. 1971. UNISIST: Intergovernmental conference for the establishment of a World Science Information System. Final Report. Publ. SC/MD/25. Paris:Unesco. 60 p.

236.
Unesco. 1973. UNISIST guidelines for the establishment and development of multilingual thesauri. Publ. SC/WS/555. Paris: Unesco. 37 p.

237.
Unesco. 1973. Meeting of consultants on the incorporation of the social sciences into UNISIST. Final report. Publ. SHC/WS/323. Paris: Unesco. 9 p.

238.
Unesco. 1974. UNISIST information policy objectives. UNISIST proposals. Publ. SC/74/WS/3. Paris: Unesco. 26 p.

239.
Unesco. 1974. Meeting of experts on the problems and strategies of incorporating the social sciences into the world science information system (UNISIST). Final report and recommendations. Paris: Unesco. 16 p.

240.
Unesco. 1974. UNISIST guidelines on the planning of national scientific and technological information systems. Draft document. Publ. SC/74/WS/52. Paris: Unesco. 55 p.

241.
Unesco. 1974. UNISIST Advisory Committee, first session, 4-8 Feb. 1984. Final report. Paris: Unesco. 26 p.

242.
Unesco. 1975. First UNISIST meeting of experts on regional information policy development in south Asia, Colombo, Sri Lanka. Final report. Publ. SC/UNISIST/SAI/16. Paris: Unesco. 9 p.

243.
Unesco. 1976. UNISIST seminar on the education and training of users of scientific and technological information. Paris: Unesco. 106 p. [ERIC:ED-186-035].

244.
Unesco. 1976. UNISIST guidelines for the establishment and development of multilingual thesauri. Paris: Unesco. 49 p.

245.
Unesco. 1976. UNISIST seminar on the training of users of scientific and technical information: analysis and evaluation of UNISIST guidelines. Paris: Unesco. 75 p. [ERIC:ED-186-036].

246.
Unesco. 1976. An international system for the exchange of information on science and technology for policy-making management and development. (SPINES). Paris: Unesco. 15 p.

247.
Unesco. 1977. Participation of Member States in the General Information Programme: harmonization of activities. Publ. PGI/COUNCIL/I/6. Paris:Unesco. 6 p.

248.
Unesco. 1978. Meeting of the ad hoc group on the establishment of a common communications format, 1st. Publ. PGI/CCF/I/1. Paris:Unesco. 12 p.

249.
Unesco. 1978. Symposium of editors of documentation, library and archives journals, 2nd. Summary report. Publ. PGI.78/WS/25. Paris:Unesco. 14 p.

250.
Unesco. 1978. A study on the application of scientific and technological information in development; field study in India. Publ. PGI.78/WS/23. Paris:Unesco. 46 p.

251.
Unesco. 1979. Meeting of the ad hoc group on the establishment of a common communications format, 2nd. Publ. PGI/CCF/2.4. Paris:Unesco. 35 p.

252.
Unesco. 1979. Intergovernmental conference on scientific and technological information for development, UNISIST II, Paris, 28 May to 1 June 1979. Final report. Publ. PGI/MD/1. Paris:Unesco. 75 p.

253.
Unesco. 1979. UNISIST, guidelines on referral centres. Publ. PGI/79/WS/4. Paris:Unesco. 49 p.

254.
Unesco. 1979. National focal points (FP) and UNISIST national committees (NC). Publ. PGI.79/WS/2. Paris:Unesco. 9 p.

255.
Unesco. 1979. Meeting of experts on the development of scientific and technological information systems in the Arab States. Final report. Publ. PGI.78/CONF.609/7. Paris:Unesco. 27 p.

256.
Unesco. 1980. Meeting of the ad hoc group on the establishment of a common communications format, 3rd. Publ. PGI/CCF/3.3. Paris:Unesco. 19 p.

257.
Unesco. 1980. Information services on research in progress: a resource for development. Paris: Unesco. 20 p.

258.
Unesco. 1980. Regional seminar on techniques for transfer of scientific and technological information in Latin America and the Caribbean. Publ. PGI/80/WS/8. Paris:Unesco.

259.
Unesco. 1980. Meeting of the ad hoc group on the establishment of a common communications format, 4th. Publ. PGI/CCF/4.3. Paris:Unesco. 5 p.

260.
Unesco. 1980. National focal points and national information committees. Publ. PGI.80/WS/25. Paris:Unesco. 10 p.

261.
Unesco. 1980. UNISIST working group on technology of systems' interconnection, 2nd. Report. Publ. PGI.82/WS/2. Paris:Unesco. 21 p.

262.
Unesco. 1980. Meeting of the expert group on a prelim. study on an intern. info. system relating to new and renewable energy sources. Publ. PGI.80/EGE.I/5. Paris:Unesco. 13 p.

263.
Unesco. 1980. Regional seminar on techniques for information transfer in science and technology in Latin America and the Caribbean: report and recommendations. Publ. PGI.80/WS/8. Paris:Unesco. 39 p.

264.
Unesco. 1982. The use of satellite communication for information transfer. Publ. PGI.82/WS/5. Paris:Unesco.

265.
Unesco. 1982. Survey of archival and records management systems and services. Publ. PGI.82/WS/3. Paris:Unesco. 16 p.

266.
Unesco. 1982. Information services on research in progress; a worldwide inventory. Paris: Unesco. 320 p.

267.
Unesco. 1983. Manual on bibliographic control. Publ. PGI.83/WS/8. Paris:Unesco. 85 p.

268.
Unesco. 1983. Course for teacher trainees who wish to take school librarianship as a major in their teacher training course. Publ. PGI.83/WS/12. Paris:Unesco. 421 p.

269.
Unesco. 1983. The evaluation of SISMAKOM: computerized SDI project. Publ. PGI.83/WS/16. Paris:Unesco. 15 p.

270.
Unesco. 1984. UNISIST working group on technology of systems interconnection. Paris: General Information Programme, Unesco. 43 p. [ERIC:ED-253-193].

271.
Unesco. 1985. List of documents and publications of the General Information Programme and UNISIST: 1977-1983. Publ. PGI-85/WS/7. Paris:Unesco. 196 p.

272.
Vajda, E. 1980. UNISIST guide to standards for information handling. Paris:Unesco. 304 p.

273.
Valls, J. 1983. Working document on scientific and technological information in Asia and the Pacific: overview, needs and recommendations. Publ. PGI.83/WS/7. Paris:Unesco. 86 p.

274.
Vickery, B.C. et al. 1969. Classification in science information; a comparative study undertaken by ASLIB for ICSU as a contribution to the UNISIST feasibility study. Paris:ICSU. 121 p.

275.
Vilentchuk, L. 1975. Guidelines on the conduct of a national inventory of scientific and technological information and documentation facilities. Publ. SC.75/WS/28. Paris:Unesco. 46 p.

276.
Wade, N. 1972. UNISIST and SIE: promise and fulfillment in informatics. Science 176: 266.

277.
Wasserman, P. & J.R. Rizzo. 1977. UNISIST: a course in administration for managers of information services: design, implementation and topical outline. Paris: Unesco. 84 p. [ERIC:ED-157-499].

278.
Weill, G. 1981. The admissibility of microforms as evidence: a RAMP study. Publ. PGI.81/WS/25. Paris:Unesco. 84 p.

279.
Wellisch, H. 1976. Dewey Decimal Class., Univ. Decimal Class., and the Broad System of Ordering: the evolution of universal ordering schemes. In: Major classification systems. K. Henderson (ed.) Urbana-Champaign: U. Illinois. pp. 113-23.

280.
Werdel, J. 1974. CISTIP established within the Academy. Bull. ASIS 1(3): 8.

281.
Wesemael, A.L. van. 1974. International standardization of serials records: ISSN and ISDN. Cat. Index 34: 15-6.

282.
Wesley-Tanaskovic, I. 1979. International science information: trends and prospects. Unesco J. Info. Sci., Libr. & Archives Admin. 1(2): 104-11.

283.
Wesley-Tanaskovic, I. 1983. National information policy and plan: scope, formulation and implementation. Publ. PGI.83/WS/27. Paris:Unesco. 13 p.

284.
White, B. 1982. Directory of audio-visual materials for use in records management and archives administration training. Publ. PGI.82/WS/8. Paris:Unesco. 71 p.

285.
Wilson, T.D. 1978. Guidelines for developing and implementing a national plan for training and education in information use. Publ. PGI/E.T.III/INF.5. Paris:Unesco. 84 p.

286.
Wilson-Davis, K. et al. 1978. UNISIST guidelines for the conduct of user studies; revised draft. Publ. PGI.78/WS/28. Paris:Unesco. 172 p.

287.
Wollman, P. 1975. Guidelines on the conduct of a national inventory of current research and development projects. Publ. SC.75/WS/13. Paris:Unesco. 49 p.

288.
Woolston, J.E. 1975. International information systems: their relation to economic and social development. In: Information systems: their interconnection and compatibility. Vienna: Int. Atomic Energy Agency. pp. 51-60.

289.
Wysocki, A. & J. Tocatlian. 1971. World science information system; necessary and feasible. Taxon 20: 603-8.

290.
Wysocki, A. & J. Tocatlian. 1971. A world science information system: necessary and feasible. Unesco Bull. Libr. 25(2): 62-6.

291.
Wysocki, A. & J. Tocatlian. 1972. UNISIST intergovernmental conference for the establishment of a World Science Information System. Unesco Bull. Libr. 26: 58-62.

292.
Wysocki, A. 1976. The UNISIST programme: present and future development. In: Information systems design for socio-economic development: retrospect and prospect. The Hague: Int. Fed. Docum. (FID) pp. 77-83.

293.
Wysocki, A. 1973. UNISIST programme and cooperation with FID. In: Participation of small and less industrialized countries in worldwide documentation activities and information exchange. Budapest: Hungarian Nat. Comm. FID. pp. 34-40.

294.
Wysocki, A. 1972. Educational and training issues in UNISIST. In: Proc. Int. Conf. on Training for Information Work. G. Lubbock (ed.) The Hague: FID (Publ. 486). pp. 29-40.

295.
Wysocki, A. 1972. UNISIST Intergovernmental Conference. Unesco Bull. Libr. 26(2): 58-62.

296.
Wysocki, A. 1972. [The 1972 UNISIST conference: summary of the results.] [Fr.] Documentaliste 9(3): 108-9.

297.
Wysocki, A. 1978. International cooperation in information transfer. J. Docum. 34(4): 300-10.

298.
Wysocki, A. 1977. UNISIST programme: general characteristics. Int. Forum Inf. Docum. 2(2): 5-7.

299.
Wysocki, A. 1970. [World science information system UNISIST.] [Russ.] Akt. Probl. Inf. Dokum. 15(6): 1-4.

300.
Wysocki, A. 1975. UNISIST programme: its role in international cooperation in scientific and technical information. In: Information systems; their interconnections and compatibility. Vienna: IAEA. pp. 3-13.

301.
Wysocki, A. 1976. The UNISIST programme: a framework for international information exchange. In: Proc. UNISIST Int. Symp. Inf. Sys. & Services in Ongoing Res. in Sci., pp. 403-11.

302.
Wysocki, A. 1978. Education and training of information specialists and users - the UNISIST experience. ERIC. ED-190-151. 8 p.

303.
Zolia, N. 1976. Education of UNISIST users. Informatologica Yugoslavica 8(1/4): 67-9.

304.
Zwemer, R.L. 1971. UNISIST: world science information system. Bioscience 21: 1001-2.

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APPENDIX

I. Abbreviations used in the Bibliography

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1. JOURNAL TITLES

Akt. Probl. Inf. Dokum. - Aktualne Problemy Informacji i Dokumentacji
Annals Libr. Sci. & Docum. - Annals of Library Science and Documentation
Ann. Rev. Info. Sci. & Tech. - Annual Review of Information Science and Technology
ASIS Bull. - Bulletin of the American Society for Information Science
Aslib Proc. - Aslib Proceedings
Aust. Libr. J. - Australian Library Journal
Bibliog., Documen., Terminology - Bibliography, Documentation, Terminology
Bok og Bibl. - Bok og Bibliotek
Brit. Libr. Res. & Dev. Newsletter - British Library Research and Development Newsletter
Bull. ASIS - see ASIS Bull.
Cah. Docum. - Cahiers de la Documentation
Can. Libr. J. - Canadian Library Journal
Cat. Index - Catalogue and Index
Educ. for Info. - Education for Information
FID News Bull. - FID News Bulletin
IFLA J. - IFLA Journal
Info. Hotline - Information Hotline
Info.: News & Sources - Information: News and Sources
Info.: Rept. & Bibliog. - Information: Reports and Bibliographies
Info. Retrieval & Libr. Auto. - Information Retrieval and Library Automation
Intern. Cat. - International Cataloguing
Intern. Classif. - International Classification
Int. Forum Inf. Docum. - International Forum on Information and Documentation
Int. Libr. Rev. - International Library Review
J. ASIS - Journal of the American Society for Information Science
J. Doc(um). - Journal of Documentation
J. Info. Sci. Princ. & Prac. - Journal of Information Science; Principles and Practice
J. Libr. Inf. Sci. (India) - Journal of Library and Information Science (India)
J. Libr. Automation - Journal of Library Automation
Libr. Assoc. Rec. - Library Association Record
Libr. Her. - Library Herald
Libr. J. - Library Journal
Libr. Sci. Slant Docum. - Library Science with a Slant to Documentation
Nachr. Dokum. - Nachrichten fuer Dokumentation
Nauch. Tekh. Inf. - Nauchno-Tekhnicheskaya Informatsiya
Nigerian Libr. - Nigerian Libraries
Pakistan Lib. Bull. - Pakistan Library Bulletin
Physics Bull. - Physics Bulletin

Pub. Wkly. - Publishers Weekly
Spec. Libr. - Special Libraries
State Libn. - State Librarian
Tid(sk). Dok(um). - Tidskrift foer Dokumentation
Unesco Bull. Libr. - Unesco Bulletin for Libraries
Unesco J. Info. Sci., Libr. & Archives Admin. - Unesco Journal of Information Science, Librarianship and Archives Administration

2. ASSOCIATIONS, CONGRESSES, PROGRAMMES

Aslib - Association of Special Libraries and Information Bureaux
ASIS - American Society for Information Science
BSO - Broad System of Ordering (UNISIST)
DEVSIS - Development Sciences Information System (Canada)
ERIC - Educational Resources Information Center
FID - Federation Internationale de Documentation
Hungarian Central Tech. Libr. & Docum. Centre - Hungarian Central Technical Library and Documentation Centre
IAALD - International Association of Agricultural Librarians and Documentalists
IAEA - International Atomic Energy Agency
ICSU - International Council of Scientific Unions
IFLA - International Federation of Library Associations
Infoterm - International Information Centre for Terminology
INIS - International Nuclear Information System
Int. Dev. Res. Centre (IDRC) - International Development Research Centre (Canada)
Intergov. Council Gen. Info. Prog. - Intergovernmental Council of the General Information Programme (UNESCO)
Intern. Congr. - International Congress
ISDN - Institute for the Study of Developing Nations
ISDS - International Serials Data System
ISO - International Standards Organization
ISSN - International Standard Serials Number
MARC - Machine-readable Cataloguing (Library of Congress)
NATIS - National Information Systems (UNESCO)
NZ Libr. Assn. - New Zealand Library Association
PGI - General Information Programme (UNESCO)
RAMP - Records and Archives Management Programme (UNESCO)
SDI - Selective Dissemination of Information
SLA - Special Libraries Association
Smithsonian Sci. Info. Exchange - Smithsonian Science Information Exchange
SPINES - Science and Technology Policies Information Exchange System (United Nations)
Swed. Soc. Tech. Docum. - Swedish Society for Technical Documentation
UAP - Universal Availability of Publications
U.B.C. - University of British Columbia
UNESCO - United Nations Educational, Scientific, and Cultural Organization
UNIBID - UNISIST International Centre for Bibliographic Descriptions
UNISIST - World Science Information System (see Introduction)